

REMARKS

Claims 1-9, 11-29, 31, 32, 34-42 and 44-49 were pending in the present application prior to amendment. Please cancel claims 15, 16, 36, 37, 46, and 47 without prejudice or disclaimer. Claims 1-9, 11-14, 17-29, 31, 32, 34, 35, 38-42, 44, 45, 48, and 49 are pending after entry of the current amendment. Applicant believes that the present application is in condition for allowance in view of the remarks herein; thus, a prompt and favorable action to this end is respectfully requested.

I. WITHDRAWAL OF THE FINALITY OF THE PREVIOUS OFFICE ACTION

Applicant gratefully acknowledges the Examiner's withdrawal of the finality of the previous Office Action.

II. AMENDMENT TO THE SPECIFICATION

Applicant amends the Specification as indicated above to clarify readability. No new matter is added.

III. CLAIM 20Claim 20

Applicant would like to call the Examiner's attention to the fact that in the Office Action Response of March 11, 2008, claim 20 was amended to return language inadvertently removed. However, the amended claim was identified as "(Previously presented)" rather than "(Currently amended)". In the present Office Action (non-final office action dated April 10, 2008), the Examiner addresses the claim language of the amendments made on March 11, 2008 even though the amendment was inconsistently marked.

IV. CLAIM REJECTION UNDER 35 USC §112

The Examiner rejects Claim 6 under 35 USC §112, first paragraph, as allegedly failing to comply with the enablement requirement. This rejection is respectfully traversed.

Claim 6 recites:

6. (Original) The system of claim 1 wherein position data related to a position of the wireless access point is stored in a management information base as part of the wireless access point, the displayed data based on the determined position being the position data of the wireless access point.

Claim 6 is fully supported in the specification for at least two reasons. First, claim 6 is an original claim and is therefore part of the originally-filed specification. Since a person of ordinary skill in the art would be able to practice the features of claim 6 without undue experimentation based on the plain language of claim 6, the enablement requirement is satisfied. Second, the features of claim 6 are clearly described in paragraph [0053] of the specification (referring to the paragraph number of the published patent application), which notes (emphasis added):

The position of each beacon 104 can be precisely determined by network assisted position determination technology, known in the art, to provide accurate position data (i.e., latitude, longitude and altitude) for each beacon 104 or the precise location can be based upon a geocode lookup based upon the address. In this embodiment, the beacon 104 can make a position determination request to the PDE 126, which may deliver the position data to the beacon via the network 120. **Alternatively, the precise latitude, longitude and altitude of the beacon 104 may be determined at the time of installation and preprogrammed into the beacon 104 using, by way of example, the management information base (MIB) of the beacon itself.** Those skilled in the art will recognize that the MIB typically stores network information, user information, log-in status, and the like. In this embodiment, the MIB is expanded to include data indicating the latitude, longitude and altitude of the beacon 104 and/or address.

In the embodiment described in paragraph [0053], “precise latitude, longitude and altitude of the beacon 104” are examples of “position data related to a position of the wireless access point” of claim 6. The position data is “stored in a management information base as part of the wireless access point” (claim 6) since the latitude, longitude, and altitude are “preprogrammed into the beacon 104 using, by way of example, the management information base (MIB) of the beacon itself” in the embodiment described in paragraph [0053]. The above description is clearly enabling.

For at least these reasons, the rejection of claim 6 under 35 U.S.C. 112 is improper, and its withdrawal is respectfully requested.

V. CLAIM REJECTION UNDER 35 USC §103

Claims 1-9, 11-32, 34-42, and 44-49 stand variously rejected under combinations of two or more of U.S. Published Patent Application No. 20030134646 to Forrester (“Forrester”), U.S. Published Patent Application No. 20020184418 to Blight (“Blight”), U.S. Published Patent Application No. 20030046158 to Kratky (“Kratky”), U.S. Published patent Application No. 20040030601 to Pond (“Pond”), and U.S. Published Patent Application No. 20030118015 to Gunnarsson (“Gunnarson”). In view of the amendments and remarks herein, Applicant respectfully traverses the rejections. Applicant respectfully requests withdrawal and allowance.

While Applicant does not detail the clarity issues with respect to this and the previous Office Action, Applicant notes that the rejections again fail to properly address the exact claim features in a way that allows Applicant to clearly understand the basis for the rejections. Applicant respectfully requests that, if the rejections are maintained or new rejections made, subsequent Office Actions clearly identify which exact claim features are alleged to be taught by particular portions of applied prior art.

Claim 1

In the interest of advancing prosecution, Applicant has amended claim 1 to include features of claims 15 and 16, to emphasize the differences between Applicant’s disclosure and the cited art.

Prior to entry of the current amendment, Claim 1 stands rejected under 35 U.S.C. 103 as allegedly being obvious over Forrester in view of Blight and Kratky. Although the Office Action is unclear about which teachings in the applied references are alleged to correspond to which claim features, Applicant assumes that the Office Action is alleging that if the disclosure of Forrester related to a cell phone system is applied to a WLAN system, the service access point would provide assistance data to the associated device. Without agreeing that such an interpretation is warranted (e.g., that Forrester enables

such a construction), Applicant notes that even with this interpretation, Forrester does not teach or suggest the features of amended Claim 1.

At page 13, with respect to previous Claim 16, the Office Action alleges that:

As to claim 16, 37, 47, Forrester further discloses the system of claim 15 wherein the position determining entity generates a weighted combination “RF generated by weighted combination is inherently” of the data received from the GPS satellites and data from the wireless access point to determine the position of the mobile communication device (col. 2, par. [0020]-[0021]).

However, the cited portion of Forrester does not teach or suggest the features of Claim 16. Furthermore, it would not have been obvious to modify the teachings of Forrester to include these features.

The cited portion of Forrester teaches:

[0020] Device 200 also preferably includes memory 228. Memory 228 can be used to store the software instructions used by both GPS receiver 226 and communication transceiver 224 as well as to store position assist information as described below. Thus, memory 228 can comprise a single memory device or a plurality of devices as required by the particular implementation of device 200.

[0021] Device 200 also includes GPS processor 208 configured to process GPS signals received via antenna 202. The received signals are preferably filtered and amplified in GPS receiver 204 and demodulated in GPS demodulator 206. Thus, GPS processor 208 can be configured to generate position information when requested without the aid of a network based position determination. Accordingly, the implementation of FIG. 2 can overcome problems associated with network based position determination, such as increased traffic and a limited operating range. But, as mentioned, including a full GPS receiver in handset 200 drives up the cost, complexity, and size of device 200 and can also have other negative effects such as reduced battery lifetime.

Nothing in the above teaches or suggests that a “wherein the position determining entity is configured to determine the position of the mobile communication device based on the data received from the access point and the data received from the GPS satellites by generating a weighted combination of the data received from the GPS satellites and data from the wireless access point,” as recited in amended claim 1.

In general, Forrester is directed to an entirely different aspect of positioning: distributing position assist capability in a network (please see paragraph [0008] of Forrester). Position assist information (such as acquisition assist and sensitivity assist) information allows a wireless communication device to acquire, quickly and effectively, the GPS satellites needed to provide the requisite location information. (Please see paragraph [0006] of Forrester). One motivation for the techniques disclosed in Forrester is to prevent crippling of the network in an emergency, when large numbers of 911 calls would overtax the network resources now responsible for providing assistance information. (Please see paragraph [0007] of Forrester). Forrester discusses acquisition assist (AA) and sensitivity assist (SA) in paragraph [0032]:

The SA code, however, lets device 102 know when the CA code is going to invert, which allows receiver 226 to use a longer integration time on the received GPS satellite signals. Thus, the SA information along with the AA information, which can also include navigation information such as orbits, clock corrections, and other parameters related to each satellite 104, allow device 102 to acquire, quickly and efficiently, satellites 104 even when the signal strength is as low as -150 dBm.

By contrast, amended claim 1 is directed to determining the position of a mobile communication device using a weighted combination of the data received from the GPS satellites and data from the wireless access point. While position assistance helps a mobile acquire the satellites more quickly (as noted in paragraph [0006] of Forrester), it is information that helps obtain a satellite position fix, not additional position information that can be used in "weighted combination." Thus, the applied teachings of Forrester in no way teach or suggest the above features of amended claim 1.

Additionally, it would not have been obvious to modify Forrester to include the features of amended claim 1. The single mention of an access point in Forrester is in paragraph [0016], which at most can be construed as suggesting that in a WLAN implementation, an access point can provide position assistance data to a mobile. Modifying Forrester to include Applicant's techniques (in particular, using a weighted combination of data from the wireless access point and GPS data from satellites) would clearly be an impermissible hindsight-based reconstruction of Applicant's claimed techniques.

For at least the above reason, amended claim 1 is patentable over the cited references.

Claims 2-9, 11-14, and 17-19

Claims 2-9, 11-14 and 17-19 depend from claim 1, and are therefore patentable for at least the same reasons noted above.

Claim 6 - 9

Claim 6 is patentable for at least the additional reason that it would not have been obvious to modify Forrester to include the feature "wherein position data related to a position of the wireless access point is stored in a management information base as part of the wireless access point, the displayed data based on the determined position being the position data of the wireless access point.," as recited in Claim 6.

At page 12, the Office Action alleges that the features of claim 6 may be found in column 2, paragraph [0031], display 114 of Blight, and also references col. 2, paragraph [0034], and paragraph [0083] of Blight. However, the cited portions do not so teach. In the cited paragraphs, Blight teaches the following:

[0031] Handheld computer 100, depicted in FIG. 1, includes a plurality of input function keys 112 and a display 114 having graphical user interface features. Display 114 may be provided with a touch screen interface that allows a user to select and alter displayed content using a pointer, such as but not limited to a stylus, a pen tip, a fingertip, or other pointing devices.

[0034] In an exemplary embodiment, handheld computer 100 also includes navigation buttons 124 that may be utilized for navigating or scrolling of information displayed on display 114. Further, navigation buttons 124 may be programmed for other uses depending on the application running on handheld computer 100. Handheld computer 100 may be used for any of a variety of wireless communications, including, but not limited to, communications with the World Wide Web, mobile telephone communications, e-mail communications, etc.

[0083] Further, in an exemplary embodiment the location database on server 270 may include a graphics map. A graphics map is the data structure which contains the visual information about an area. The graphics map may consist of a tree structure of zones (user type). Each zone has graphic information which can be used in rendering a map of the zone.

None of the cited paragraphs disclose the features of claim 6.

Even if they did so, modifying Forrester to include the features of claim 6 would again clearly be a hindsight reconstruction of Applicant's claimed features. As noted above, the single mention of an access point could at most be construed as suggesting that an access point can provide position assistance data to a mobile. There is no teaching or suggestion of using the access point for positioning, or displaying data that is position data of the wireless access point. Even in the implementation discussed at length in Forrester (directed to a cellular network implementation of distributing position assist capabilities), there is no teaching or suggestion to display data that is position data of a BTS.

Similarly, it would not have been obvious for a person of ordinary skill in the art to modify the teachings of Forrester to include the features of claims 7-9. These claims are thus patentable for reasons related to their particular additional features, in addition to the reasons related above with respect to claim 1.

Claims 11-14

Claims 11-14 include features directed to non-position information; for example, store and/or merchant information.

However, it would not have been obvious to modify Forrester to include such features, since Forrester is directed to distributing position assist capabilities throughout the network (please see paragraph [0008] of Forrester). One important use of Forrester's technique is to provide an advantage during a large-scale emergency (please see paragraph [0009] of Forrester). Although Forrester notes that the techniques may provide advantages during less critical operation (please see paragraph [0009] of Forrester), implementation during an emergency teaches away from using network resources for store and/or merchant information. Additionally, as above, the suggested modification would not have been obvious in view of the single mention of an access point in Forrester.

These claims are thus patentable for reasons related to their particular additional features, in addition to the reasons related above with respect to claim 1.

Claims 17-19

Claims 17-19 include features related to the cellular telephone network. For example, claim 17 recites “further comprising a wireless telephone receiver to receive communication signals from a base transceiver station, the position determining entity using the communication signals from the base transceiver station to determine the position of the mobile communication device.”

Again, there is no teaching or suggestion in Forrester to use communication signals from a base transceiver station to determine the position of the mobile communication device, in addition to data received from the access point. Again assuming that Forrester teaches an embodiment in which an access point can provide position assistance, it does not teach any kind of an embodiment including both an access point and base transceiver station having the particular features of Applicant’s claims. Forrester teaches alternate embodiments, and it is improper for the Office Action to pick and choose elements of different embodiments of the references to recreate Applicant’s claims.

Forrester teaches that either the BTS or (possibly) an access point provides position assistance data. Claims 17-19 teach determining the position of the mobile communication device using both data received from an access point and communication signals from a base transceiver station. Even if combining embodiments were permissible, such a modification does not make sense. Modifying Forrester to include both its purportedly disclosed embodiments would lead to both the BTS and the access point providing position assistance information, since Forrester does not teach or suggest the types of techniques and positioning information disclosed by Applicant. Such a modification would not include the features of Applicant’s claims 17-19 and instead would lead to redundancies in position assistance information.

Claims 20 - 28

Claims 20-28 are patentable for similar reasons to those stated above. As noted previously, it is improper for the Office Action to pick and choose elements of different embodiments of the references to recreate Applicant’s claims. The described embodiment of Forrester only teaches a cellular telephone network embodiment, and paragraphs [0016] and [0017] of Forrester may disclose an alternate embodiment. Since

Forrester neither teaches nor suggests a particular embodiment with both “a wireless telephone receiver” and “a wireless computer network transceiver,” the rejection of claims 20-28 is improper.

Similar to the argument related to claims 17-19 above, a modification of Forrester to include both embodiments does not make sense. Modifying Forrester to include both its purportedly disclosed embodiments would lead to both the BTS and the access point providing position assistance information, since Forrester does not teach or suggest the types of techniques and positioning information disclosed by Applicant.

Claims 29, 31, 32, 34, 35, 38, and 39

Claim 29 has been amended to include features similar to those of amended claim 1, and is patentable for at least the same reasons discussed above with respect to claim 1. The dependent claims are also patentable for at least the additional reasons outlined with respect to similar dependent claims discussed above.

Claims 40-42, 44, 45, 48, and 49

Claim 40 has been amended to include features similar to those of amended claim 1, and is patentable for at least the same reasons discussed above with respect to claim 1. The dependent claims are also patentable for at least the additional reasons outlined with respect to similar dependent claims discussed above.

CONCLUSION


It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue, or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

In light of the comments herein, Applicant submits that the application is in condition for allowance, for which early action is requested. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026. If a fee is required for an extension of time under 37 CFR 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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